

**TOUCH PANEL SYSTEM AND METHOD FOR  
DISTINGUISHING MULTIPLE TOUCH INPUTS**

**Abstract of the Disclosure**

5        Touch panel systems and methods are disclosed that can distinguish temporally overlapping touch inputs from single touch inputs so that valid touch position coordinates can be determined. Touch panel systems and methods of the present invention can distinguish overlapping touches by comparing signal magnitudes to specified thresholds, by comparing the rates of change of signal 10 magnitudes or measured positions to determined parameters, by locating the proximity a calculated location to icons or other such active areas, and the like. Because touch panel systems and methods of the present invention can discriminate single touches from double touches, they can be used in multiple user applications such as multiplayer games as well as in applications that may be 15 subject to rapidly successive or overlapping touch inputs.